



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re Application of:

Muthiah Manoharan
 Venkatraman Mohan
 Phillip Dan Cook
 Andrew M. Kawasaki

COPY OF PAPERS
ORIGINALLY FILEDGroup Art Unit: Not
Assigned

Examiner: Not Assigned

For: OLIGONUCLEOTIDES HAVING A DNA
 FORM AND B-DNA FORM CONFORMATIONAL
 GEOMETRY

DECLARATION AND POWER OF ATTORNEY

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name; and

I believe that I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a

Utility Patent Design Patent

is sought on the invention, whose title appears above, the specification of which:

is attached hereto.
 was filed on October 4, 2001 as Serial No. 09/970,971.
 said application having been amended on _____.

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose to the U.S. Patent and Trademark Office all information known to be material to the patentability of this application in accordance with 37 CFR § 1.56.

I hereby claim foreign priority benefits under 35 U.S.C. § 119(a-d) of any **foreign application(s)** for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of any application on which priority is claimed:

Priority Claimed (If X'd)	Country	Serial Number	Date Filed
<input type="checkbox"/>			
<input type="checkbox"/>			
<input type="checkbox"/>			

I hereby claim the benefit under 35 U.S.C. § 120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of 35 U.S.C. § 112, I acknowledge the duty to disclose to the U.S. Patent and Trademark Office all information known to be material to patentability as defined in 37 CFR § 1.56 which became available between the filing date of the prior application and the national or PCT international filing date of this application:

Serial Number	Date Filed	Patented/Pending/Abandoned
09/303,586	05/03/99	Pending
08/936,166	09/23/97	Pending
07/835,932	03/05/92	Pending
PCT/US91/05720	08/12/91	

I hereby claim the benefit under 35 U.S.C. § 119(e) of any United States provisional application(s) listed below:

Serial Number	Date Filed

I hereby appoint the following persons as attorney(s) and/or agent(s) to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith:

Attorney/Agent	Registration No.
John W. Caldwell	28,937
Michael P. Straher	38,325

of WOODCOCK WASHBURN LLP, One Liberty Place - 46th Floor, Philadelphia, Pennsylvania 19103 and

Herb Boswell	Registration No. 27,311
Laurel Bernstein	Registration No. 37,280
Robert S. Andrews	Registration No. 44,508
April Logan	Registration No. 33,950
Neil S. Bartfeld	Registration No. 39,901
Kenneth H. Tarbet	Registration No. 43,181

of ISIS PHARMACEUTICALS, INC., 2292 Faraday Avenue, Carlsbad, California 92008

Address all telephone calls and correspondence to:

WOODCOCK WASHBURN LLP
One Liberty Place - 46th Floor
Philadelphia PA 19103
Telephone No.: (215) 568-3100
Facsimile No.: (215) 568-3439

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Name: Mithiah Manoharan	Signature
Mailing Address: 7634 Reposado Drive Carlsbad, CA 92009	Date of Signature: _____
City/State of Actual Residence: Carlsbad, CA 92009	Citizenship: USA

Name: Venkatraman Mohan	Signature 
Mailing Address: 7042 Via Cabana 10 Sycamore DR. Carlsbad, CA 92009 Plainsboro, NJ. 08536	Date of Signature: 12-07-01
City/State of Actual Residence: Carlsbad, CA 92009 Plainsboro, NJ 08536	Citizenship: India USA

Name: Phillip Dan Cook	Signature
Mailing Address: 5237 Olive Hill Road Fallbrook, CA 92028	Date of Signature: _____
City/State of Actual Residence: Fallbrook, CA 92028	Citizenship: USA

Name: Andrew M. Kawasaki	Signature 
Mailing Address: 10554 Abalone Terrace San Diego, CA 92130	Date of Signature: 12-04-01
City/State of Actual Residence: San Diego, CA 92130	Citizenship: USA



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Muthiah Manoharan
Venkatraman Mohan
Phillip Dan Cook
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Group Art Unit: Not Assigned

Examiner: Not Assigned

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Michael P. Straher	38,325

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Kenneth H. Tarbet	Registration No. 43,181

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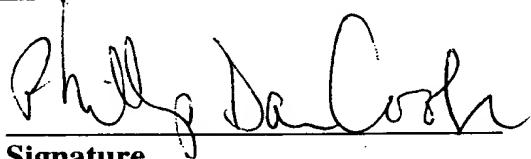
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Facsimile No.: (215) 568-3439

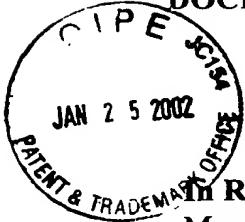
I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Name: <i>muthiah</i> Muthiah Manoharan	Signature: <i>Muthiah M. Manoharan</i>
Mailing Address: 7634 Reposado Drive Carlsbad, CA 92009	Date of Signature: <i>11/30/01</i>
City/State of Actual Residence: Carlsbad, CA 92009	Citizenship: USA

Name: Venkatraman Mohan	
Mailing Address: 7042 Via Cabana Carlsbad, CA 92009	Signature
City/State of Actual Residence: Carlsbad, CA 92009	Date of Signature: _____
	Citizenship: India

Name: Phillip Dan Cook	 Signature
Mailing Address: 5237 Olive Hill Road Fallbrook, CA 92028	Date of Signature: <u>Dec 7, 2001</u>
City/State of Actual Residence: Fallbrook, CA 92028	Citizenship: USA

Name: Andrew M. Kawasaki	
Mailing Address: 10554 Abalone Terrace San Diego, CA 92130	Signature
City/State of Actual Residence: San Diego, CA 92130	Date of Signature: _____
	Citizenship: USA



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re Application of:
Manoharan et al.

Serial No.: 09/303,586

Group Art Unit: Not yet assigned

Filed: October 4, 2001

Examiner: Not yet assigned

For: Oligonucleotides Having A-DNA and B-DNA Form Conformational Geometry

Assistant Commissioner for Patents
Washington, DC 20231

Sir:

ASSOCIATE POWER OF ATTORNEY

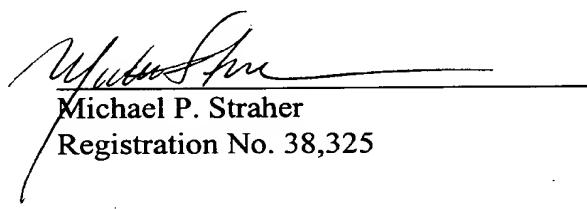
The undersigned, of the firm WOODCOCK WASHBURN LLP, One Liberty Place - 46th Floor, Philadelphia, Pennsylvania 19103, Attorney and/or Agents for Applicant(s), hereby appoints the following:

Richard E. Kurtz	Registration No. 19,263	Anthony J. Rossi	Registration No. 24,053
Dale M. Heist	Registration No. 28,425	Terence P. Strobaugh	Registration No. 25,460
John W. Caldwell	Registration No. 28,937	Michael J. Swope	Registration No. 38,041
Gary H. Levin	Registration No. 28,734	Michael J. Bonella	Registration No. 41,628
Steven J. Rocci	Registration No. 30,489	Harold H. Fullmer	Registration No. 42,560
Dianne B. Elderkin	Registration No. 28,598	John E. McGlynn	Registration No. 42,863
John P. Donohue, Jr.	Registration No. 29,916	Jonathan M. Waldman	Registration No. 40,861
Henrik D. Parker	Registration No. 31,863	Chad Ziegler	Registration No. 44,273
Suzanne E. Miller	Registration No. 32,279	Gwilym J.O. Attwell	Registration No. 45,449
Lynn B. Morreale	Registration No. 32,842	David N. Farsiou	Registration No. 44,104
Mark DeLuca	Registration No. 33,229	Paul K. Legaard	Registration No. 38,534
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Lynn A. Malinoski	Registration No. 38,788	Joseph D. Rossi	Registration No. 47,038
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Jeffrey J. King	Registration No. 38,515	Steven D. Maslowski	Registration No. 46,905
Robert B. Washburn	Registration No. 16,574	S. Maurice Valla	Registration No. 43,966
Norman L. Norris	Registration No. 24,196	Emma R. Dailey	Registration No. 48,491
Albert W. Preston, Jr.	Registration No. 25,366		
50579-1			

Vincent J. Roccia	Registration No. 43,887	Sharon Fenick	Registration No. 45,269
Robin S. Quartin	Registration No. 45,028	Daniel D. Biesterveld	Registration No. 45,898
Patrick J. Farley	Registration No. 42,524	Phillip A. Singer	Registration No. 40,176
Gregory L. Hillyer	Registration No. 44,154	Richard D. Watkins	Registration No. P50,993
Stephen C. Timmins	Registration No. 48,481	Wendy A. Choi	Registration No. 36,697
Erich M. Falke	Registration No. 49,049	Christine A. Goddard	Registration No. 46,731
Jane E. Inglese	Registration No. 48,444	Ellen M. Klann	Registration No. 44,836
Susan C. Murphy	Registration No. 46,221	Andrew J. Hagerty	Registration No. 44,141
Raymond N. Scott, Jr.	Registration No. 48,666	Scott E. Scioli	Registration No. 47,930
David L. Marcus	Registration No. 46,897		
Lawrence A. Aaronson	Registration No. 38,369		
John A. Harrelson	Registration No. 42,637		

his/her associates with full power to prosecute the above-identified application and to transact all business in the Patent Office connected therewith and requests that correspondence continue to be directed to the firm of WOODCOCK WASHBURN LLP at the above address.

Date: January 2, 2002



Michael P. Straher
Registration No. 38,325

Woodcock Washburn LLP
One Liberty Place - 46th Floor
Philadelphia PA 19103
Telephone: (215) 568-3100
Facsimile: (215) 568-3439

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